

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number  
WO 2004/057826 A1

(51) International Patent Classification<sup>7</sup>: H04L 29/06,  
12/28, 29/12, H04Q 7/38

(72) Inventors; and

(75) Inventors/Applicants (for US only): CATALINA GAL-  
LEGO, Miguel [FR/FR]; 16 rue Perier, F-92120 Mon-  
trouge (FR). JANNETEAU, Christophe [FR/FR]; 10 rue  
Auguste Renoir, F-78390 Bois D'Arcy (FR).

(21) International Application Number:  
PCT/EP2003/051026

(22) International Filing Date:  
16 December 2003 (16.12.2003)

(74) Agent: GIBSON, Sarah; Motorola European Intel-  
lectual Property Operations, Midpoint, Alencon Link,  
Basingstoke, Hampshire RG21 7PL (GB).

(25) Filing Language: English

(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

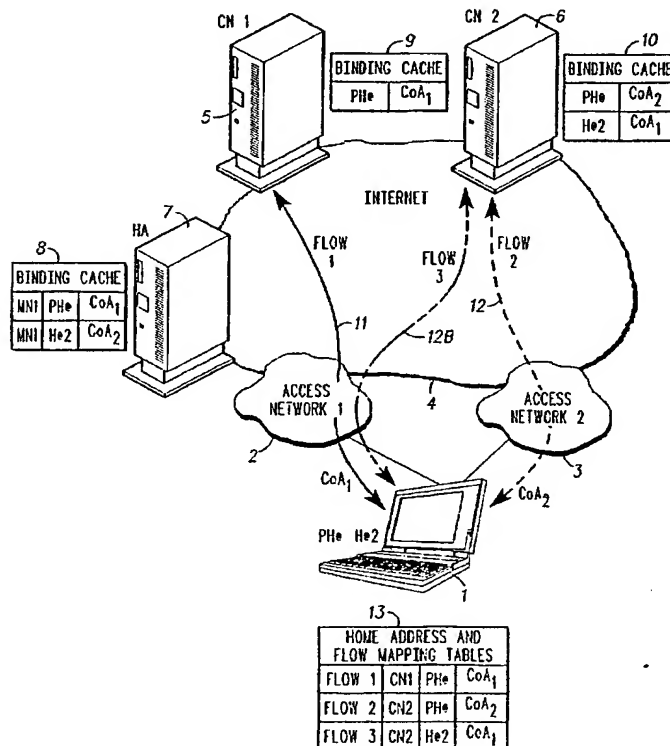
(30) Priority Data:  
02293180.2 20 December 2002 (20.12.2002) EP

(71) Applicant (for all designated States except US): MO-  
TOROLA INC [US/US]; 1303 E.Algonquin Road,  
Schaumburg, IL 60196 (US).

(84) Designated States (regional): ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: DATA FLOW HANDOVER IN COMMUNICATION USING MOBILE INTERNET *Title Changed*



(57) Abstract: A method of and a Mobile Node for communication using mobile Internet protocol between a Mobile Node (1) and Correspondent Nodes (5, 6) in a network that also comprises a Home Agent (7) for the Mobile Node. The Mobile Node (1) has a plurality of network interfaces (2, 3) with the network and performs per-flow handover management of data flows, which comprises selectively transmitting different data flows between the Mobile Node (1) and Correspondent Nodes (5, 6) over respective ones of the network interfaces (2, 3) identified by respective Internet addresses. A plurality of Home Addresses (PH@, H@z) for the Mobile Node (1) are registered with the Home Agent (7), respective ones of which are allocated dynamically to the different data flows between the Mobile Node (1) and Correspondent Nodes (5, 6), and respective network interfaces (2, 3) for the Mobile Node are allocated dynamically to the Home Addresses (PH@, H@z), so that the different data flows between the Mobile Node (1) and the same Correspondent Node (5 or 6) are allocated to respective network interfaces (2, 3) and the allocation of network interfaces (2, 3) may be modified dynamically. This method enables the handover protocols to be in conformity with the existing mobility standards, and not to require any changes on the Correspondent Node side nor in the Home Agent.